



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,916	05/15/2001	Pil-sang Ju	Q64442	7573

7590 04/04/2007
SUGHRUE, MION, ZINN
MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, NW
Washington, DC 20037-3213

EXAMINER

YENKE, BRIAN P

ART UNIT	PAPER NUMBER
----------	--------------

2622

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/854,916

Applicant(s)

JU ET AL.

Examiner

BRIAN P. YENKE

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment (15 Feb 07).
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 20-23 and 25-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) all the above is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/28/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lea, US 6,052,750 in view of Tajima, JP6-169440 and Fuchu, US 6,314,326.

In considering claims 1, 9, 14 and 25, 27-28 and 39-41

a) *the claimed one or more function-extending modules...* is met by modules which are connected to set top box 301 (where the control device may be a television col 6, line 56-66) via a network, such as DVD 402, TV 302, Digital Camera 304, VCR 303 and satellite receiver 501 (Fig 4,5) and any new consumer

Art Unit: 2622

electronic devices that is coupled to the user's home AV system. When a new device is connected, the device is queried (col 2, line 63 to col 4, line 18), and the device provides a predefined, standardized set of control interfaces for the device.

b) the claimed a based module for receiving the control information is met where the controller would obtain the user interface and control program for each external device.

Regarding the module rack into which function-extending modules are detachably inserted, Lea does not disclose the system utilizes racks/modules.

Lea discloses a system which can operate as an HAVI network, which supports "Plug and Play".

However, the use of racks/module which can be detachably inserted into a module are conventional in the art, based upon the choice of the designer/user.

The examiner incorporates Tajima, which discloses a television unit which includes a rack where modules can be inserted/removed (Fig 1, 2), which provides a system which overcomes any burden in connecting a plurality of wires/cables with traditional devices.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lea which discloses a home networking system which allows a user to control a multitude of external apparatuses via a controller, by utilizing a system which allows the user to connect/disconnect a particular device by the connection/removal of a card, which would allow the user to connect the devices without the burden of connecting cables/wires, and would also provide the user the ability to upgrade/replace modules on the fly.

Regarding the newly added limitation regarding displaying selection information for selecting one of the plurality of function modules.

Lea/Tajima does not explicitly recite displaying selection information for selection one of the modules, although Lea does disclose that a user is able to select a device and obtain information pertaining to said selected/requested device (Fig 12a/b).

Although the concept of displaying menu/screen which allows a user(s) to select a particular source/module etc... is notoriously well known in the art, in order to provide the user information concerning which devices are controllable/connected and as a visual indicator of such.

Art Unit: 2622

The examiner relies upon Fuchu (Fig 1) wherein a display screen displays the modules/devices which the user may select and interact with.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lea/Tajima which discloses a modular system wherein a user can connect/disconnect modules easily (i.e. no cables/wires) by also providing the user a display of such modules as done by Fuchu for the reasons as stated above.

In considering claims 2-3 and 15,

Lea discloses a system where the devices send the control/display information that is required for the external device to the controller, where the controller will then display the information of the device ((Fig 12a,12b), which would allow the user to select a particular device and function of that device.

In considering claims 4, 6, 10-11, 29, 31 and 34-36

As discussed above with respect to claims 1-2, Lea discloses that each external apparatus includes a set of standardized set of control interface for the device.

However, the combination Lea and Tajima does not explicitly recite the storing/providing of an IP address.

Lea/Tajima discloses a modular system which provides the control information to the controller which is then displayed in order for the user to operate the device.

The use of an IP address/browser between a controller and external device is a conventional in the art, where the user may operate a plurality of devices from the use of a web page of a particular device.

Thus the examiner takes "OFFICIAL NOTICE" regarding such a system.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lea and Tajima which disclose a modular home networking system where the user may add/remove apparatus by using cards if desired, by allowing the devices to communicate to each other via a conventional scheme such as IP addresses which would allow the user to operate the device via the devices web/homepage.

Art Unit: 2622

Regarding the dividing the A/V data and audio and video units, based upon the device, where if the device includes audio/video (i.e. TV, DVD) these are inherent features.

In considering claims 5, 8, 12, 20-22, 30, 33 and 37

Lea discloses the communication between the devices utilizing the 1394 interface between devices, where the interface 608 receives the MPEG stream from MPEG unit 607 (Fig 6).

In considering claims 7 and 32

The combination of Lea/Tajima does not explicitly recite a mixing unit for overlapping data.

Lea discloses a home networking device which allows the interactivity with a plurality of devices and the incorporation of new devices in the system.

However, the mixing of two signals or overlapping of data is conventional in the art (i.e. PIP or text overlays, OSD) since a user would desire to view or operate more than one channel/device at a time.

Thus the examiner takes "OFFICIAL NOTICE" to such a device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lea/Tajima which disclose a modular home networking system where the user may add/remove apparatus by using cards if desired and operate multiple apparatus and view TV programs/channels, by allowing the user conventional freedom/choice in viewing/operating more than one channel/device at a time, thereby giving the user enhanced operability in the home.

In considering claims 13,26 and 38

The combination of Lea/Tajima does not explicitly recite the use of a TCP/IP protocol.

However, the TCP/IP protocol is a widely known standard communications/control protocol which is used to ensure communications between devices.

Thus the examiner takes "OFFICIAL NOTICE" to such a protocol.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lea/Tajima which disclose a modular home networking system where the user may add/remove apparatus by using cards if desired, by allowing the networked devices to send/receive data by ensuring the data was received/sent by utilizing a communications protocol which guarantees delivery/receipt of information.

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Yenke whose telephone number is (571)272-7359. The examiner work schedule is Monday-Thursday, 0730-1830 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, David L. Ometz, can be reached at (571)272-7593.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(571)-273-8300

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703)305-HELP.

Art Unit: 2622

General information about patents, trademarks, products and services offered by the United States Patent and Trademark Office (USPTO), and other related information is available by contacting the USPTO's General Information Services Division at:

800-PTO-9199 or 703-308-HELP

(FAX) 703-305-7786

(TDD) 703-305-7785

An automated message system is available 7 days a week, 24 hours a day providing informational responses to frequently asked questions and the ability to order certain documents. Customer service representatives are available to answer questions, send materials or connect customers with other offices of the USPTO from 8:30 a.m. - 8:00p.m. EST/EDT, Monday-Friday excluding federal holidays.

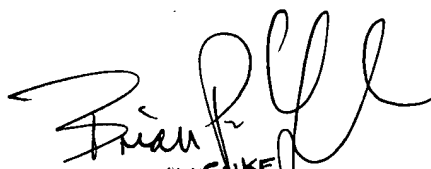
For other technical patent information needs, the Patent Assistance Center can be reached through customer service representatives at the above numbers, Monday through Friday (except federal holidays) from 8:30 a.m. to 5:00 p.m. EST/EDT.

The Patent Electronic Business Center (EBC) allows USPTO customers to retrieve data, check the status of pending actions, and submit information and applications. The tools currently available in the Patent EBC are Patent Application Information Retrieval (PAIR) and the Electronic Filing System (EFS). PAIR (<http://pair.uspto.gov>) provides customers direct secure access to their own patent application status information, as well as to general patent information publicly available. EFS allows customers to electronically file patent application documents securely via the Internet. EFS is a system for submitting new utility patent applications and pre-grant publication submissions in electronic publication-ready form. EFS includes software to help customers prepare submissions in extensible Markup Language (XML) format and to assemble the various parts of the application as an electronic submission package. EFS also allows the submission of Computer Readable Format (CRF) sequence listings for pending biotechnology patent applications, which were filed in paper form.

Art Unit: 2622



B.P.Y.
28 March 2007



BRIAN P. YEAKE
PRIMARY EXAMINER